

APPLICANT: Spertini
SERIAL NUMBER: 09/506,978

On page 24 replace the second full paragraph beginning at line 19 with the following:

63
In order to enhance stability and/or reactivity, peptides can also be modified to incorporate one or more polymorphisms in the amino acid sequence of a protein allergen resulting from natural allelic variation. Additionally, D-amino acids, non-natural amino acids or non-amino acid analogues can be substituted or added to produce a modified peptide within the scope of this invention. Furthermore, peptides can be modified to produce a peptide-PEG conjugate. Modifications of peptides can also include reduction/alkylation (Tarr in: *Methods of Protein Microcharacterization*, J.E. Silver, ed. Humana Press, Clifton, NJ, pp 155-194 (1986)); acylation (Tarr, *supra*); esterification (Tarr, *supra*); chemical coupling to an appropriate carrier (Mishell and Shiigi, eds., *Selected Methods in Cellular Immunology*, WH Freeman, San Francisco, CA (1980); U.S. Patent 4,939,239); or mild formalin treatment (*Marsh International Archives of Allergy and Applied Immunology* 41: 199-215 (1971)).

In the Claims:

Cancel claims 1-27, 31-35, and 38-40. Replace the pending claims with the following.

28. (Twice Amended) A method of modulating an immune response, said method comprising administering a substantially pure polypeptide comprising the amino acid sequence of SEQ ID NO:1 to a subject in need thereof in an amount sufficient to inhibit an immune reaction by the subject against said polypeptide.
29. (Amended) The method of claim 28, further comprising administering a second bee venom polypeptide to said subject.
30. (Twice Amended) The method of claim 29, wherein the second bee venom polypeptide is selected from the group consisting of phospholipase A₂, hyaluronidase, allergen C, mellitin, adolapin, minimine, protease inhibitor, acid phosphatase, and glycosylated IgE-binding proteins, or analogs or derivatives thereof.
36. The method of claim 28, further comprising administering one or more additional bee venom polypeptides to said subject.
- 12/2/81

APPLICANT: Spertini
SERIAL NUMBER: 09/506,978

37. (Amended) A method of modulating an immune response, said method comprising administering a substantially pure polypeptide comprising a fragment of the amino acid sequence of SEQ ID NO:1 to a subject in need thereof in an amount sufficient to inhibit an immune reaction by the subject against said polypeptide, wherein the polypeptide is a fragment of between 40 and 66 amino acids in length.

41. The method of claim 37, wherein the polypeptide is a fragment of between 40-60 amino acids in length.

42. The method of claim 37, further comprising administering one or more additional bee venom polypeptides to said subject.

43. (Amended) The method of claim 42, wherein said one or more additional bee venom polypeptides are selected from the group consisting of phospholipase A₂, hyaluronidase, allergen C, mellitin, adolapin, minimine, protease inhibitor, acid phosphatase, and glycosylated IgE-binding proteins, or analogs or derivatives thereof.

44. (Amended) A method of modulating an immune response, said method comprising administering one or more substantially pure polypeptides wherein said one or more polypeptides comprise fragments of the amino acid sequence of SEQ ID NO:1 to a subject in need thereof, in an amount sufficient to inhibit an immune reaction by the subject against said one or more polypeptides, wherein the polypeptide is a fragment of between 40 and 66 amino acids in length.

45. The method of claim 44, further comprising administering one or more additional bee venom polypeptides to said subject.

46. (Amended) The method of claim 45, wherein said one or more additional bee venom polypeptides are selected from the group consisting of phospholipase A₂, hyaluronidase, allergen C, mellitin, adolapin, minimine, protease inhibitor, acid phosphatase, and glycosylated IgE-binding proteins, or analogs or derivatives thereof.